

REMARKS/DISCUSSION OF ISSUES

Claims 1-15 are pending in the application.

Once again, the Examiner is respectfully requested to state whether the drawings are acceptable.

Reexamination and reconsideration are respectfully requested in view of the following Remarks.

35 U.S.C. § 102

The Office Action rejects claims 1-15 under 35 U.S.C. § 102 over Kojima et al. U.S. Patent 6,724,356 ("Kojima") and claims 1, 4, and 14 under 35 U.S.C. § 102 over Onodera et al. U.S. Patent 6,061,040 ("Onodera").

Applicants respectfully traverse those rejections for at least the following reasons.

Kojima

Claim 1

Among other things, the display device of claim includes control means for dynamically varying a number of sub-fields available for display of an image responsive to a determined display load being below a threshold value.

Applicants respectfully submit that Kojima does not disclose any control means for dynamically varying a number of sub-fields available for display of an image responsive to the determined display load being below a threshold value.

The Office Action states that Kojima discloses such a feature as element 25 in FIG. 6, citing col. 3, lines 60-67 and col. 6, lines 32-55.

Applicants respectfully disagree.

Applicants respectfully submit that Kojima does not disclose dynamically varying a number of sub-fields available for display of an image responsive to the determined display load being below a threshold value. Instead, Kojima consistently and repeatedly discloses that the number of sub-fields available for display of an image is determined solely on the basis of the frame length of the received video signal. (FIG. 7, steps 101 and 102, and col. 7, lines 23-30; see also, Abstract at lines 5-7; col. 2, lines 49-51; col. 5, lines 29-31; col. 6, lines 28-30; and claim 1 at col. 50, lines 50-54). Kojima does determine a weighted mean load factor, MWDEL(t). However, Kojima

does not vary the number of sub-fields available for display of an image – dynamically or otherwise – on the basis of the determined display load.

With respect to the element 25 and the text in Kojima at col. 3, lines 60-67 and col. 6, lines 32-55 cited in the Office Action, the cited text describes how element 25 calculates a difference between a load factor of a current frame and a load factor of a previous frame in order to determine whether to change the number of sustaining pulses for the sub-frames of the current frame. Kojima does not vary the number of sub-fields available for display of an image – dynamically or otherwise – on the basis of the determined display load.

Accordingly, for at least these reasons, Applicants respectfully submit that claim 1 is patentable over Kojima.

Claims 2-13 and 15

Claims 2-13 and 15 depend from claim 1 and are deemed patentable over Kojima for at least the reasons set forth above with respect to claim 1, and for the following additional reasons.

Claim 2

Among other things, Kojima does not disclose any subfield converter that dynamically varies the number of subfields available to display the image. In particular, element 24, cited in the Office Action, is not a subfield converter that dynamically varies the number of subfields available to display the image.

For at least this additional reason, Applicants respectfully submit that claim 2 is patentable over Kojima.

Claims 3 & 5

Among other things, Kojima does not disclose any means for applying partial line doubling responsive to the display load being determined to be below a threshold value. In particular, no such means for applying partial line doubling is disclosed at col. 6, lines 45-59, cited in the Office Action.

For at least this additional reason, Applicants respectfully submit that claims 3 and 5 are each patentable over Kojima.

Claims 4 & 6

Among other things, Kojima does not disclose any means for dithering responsive to the display load being determined to be below a threshold value. In particular, no such means for dithering is disclosed at col. 6, lines 45-59, cited in the Office Action.

For at least this additional reason, Applicants respectfully submit that claims 4 and 6 are each patentable over Kojima.

Claim 13

Among other things, Kojima does not disclose that the control means is arranged to introduce hysteresis by increasing the number of subfields at a higher value of the display load compared to the display load at which the number of subfields is reduced to the number of subfields before increasing the number of subfields. In particular, no such feature is disclosed at col. 7, lines 19-49, cited in the Office Action.

For at least this additional reason, Applicants respectfully submit that claim 13 is patentable over Kojima.

Claim 14

Among other things, the method of claim 14 includes dynamically varying the number of sub-fields available for display of an image responsive to the display load being determined to be below a threshold value.

As explained above with respect to claim 1, Kojima does not disclose dynamically varying a number of sub-fields available for display of an image responsive to the display load being determined to be below a threshold value. Instead, Kojima consistently and repeatedly discloses that the number of sub-fields available for display of an image is determined solely on the basis of the frame length of the received video signal.

Accordingly, for at least these reasons, Applicants respectfully submit that claim 14 is patentable over Kojima.

Onodera

Claim 1

Among other things, the display device of claim includes control means for

dynamically varying a number of sub-fields available for display of an image responsive to a determined display load being below a threshold value.

Applicants respectfully submit that Onodera does not disclose any control means for dynamically varying a number of sub-fields available for display of an image responsive to the determined display load being below a threshold value.

The Office Action states, without any citation, that Onodera discloses such a feature as element 26 in FIG. 7.

Applicants respectfully disagree.

Applicants respectfully submit that Onodera does not disclose dynamically varying a number of sub-fields available for display of an image responsive to the determined display load being below a threshold value. Meanwhile, Onodera teaches that element 26 is a sustaining voltage/current set circuit that sets and outputs either the sustaining voltage or current to the drive pixels every frame or subfield. Onodera does not teach that element 26 (or any other element) varies the number of sub-fields available for display of an image – dynamically or otherwise – on the basis of a determined display load.

Accordingly, for at least these reasons, Applicants respectfully submit that claim 1 is patentable over Onodera.

Claim 4

Claim 4 depends from claim 1 and is deemed patentable over Onodera for at least the reasons set forth above with respect to claim 1, and for the following additional reasons.

Among other things, Kojima does not disclose any means for dithering responsive to the display load being determined to be below a threshold value. In particular, no such means for dithering is disclosed at col. 11, lines 1-3, cited in the Office Action. In fact, the cited text does not even suggest the existence of any threshold.

For at least this additional reason, Applicants respectfully submits that claim 4 is patentable over Onodera.

Claim 14

Among other things, the method of claim 14 includes dynamically varying the number of sub-fields available for display of an image responsive to the display load being determined to be below a threshold value.

As explained above with respect to claim 1, Onodera does not disclose dynamically varying a number of sub-fields available for display of an image responsive to the display load being determined to be below a threshold value.

Accordingly, for at least these reasons, Applicants respectfully submit that claim 14 is patentable over Onodera.

CONCLUSION


In view of the foregoing explanations, Applicants respectfully requests that the Examiner reconsider and reexamine the present application, allow claims 1-15 and pass the application to issue. In the event that there are any outstanding matters remaining in the present application, the Examiner is invited to contact Kenneth D. Springer (Reg. No. 39,843) at (571) 283.0720 to discuss these matters.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment (except for the issue fee) to Deposit Account No. 50-0238 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17, particularly extension of time fees.

Respectfully submitted,

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